



SOUTH FLORIDA ECOSYSTEM RESTORATION TASK FORCE



LEADERSHIP • PARTNERSHIP • RESULTS



May 7, 2020 Task Force Meeting

OERI Update

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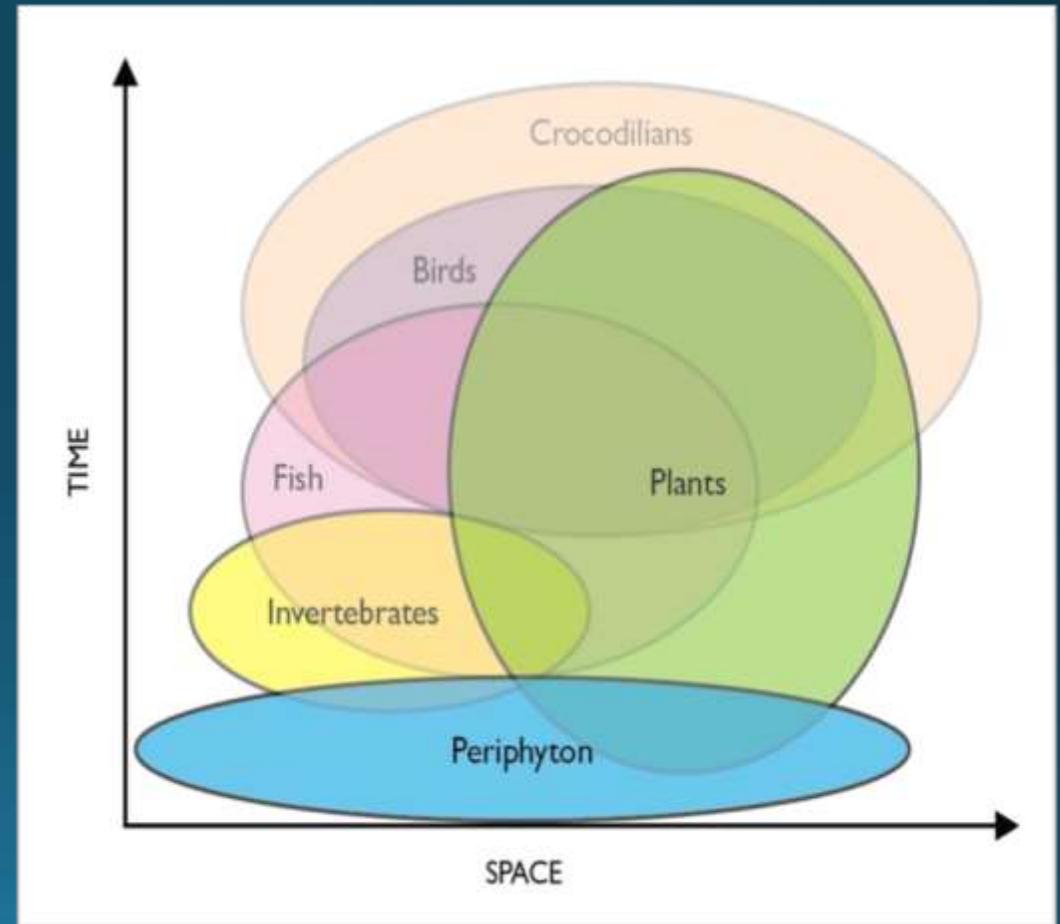
OERI Update

The following is an update on a combination of established WG/SCG priorities and new tasks raised at the October 29, 2019 Task Force meeting.

1. System-wide Ecological Indicators – Assessment/Update
2. Integrated Delivery Schedule (IDS) – Alternative Scenarios
3. Invasive Exotic Species (IES) Strategic Action Framework – Update

1. System-wide Ecological Indicators

- The Task Force established a suite of 11 **system-wide** ecological indicators based upon their collective ability to comprehensively reflect ecosystem response in terms of space and time.
- Ecological indicator summaries are included in the Task Force Biennial Report.



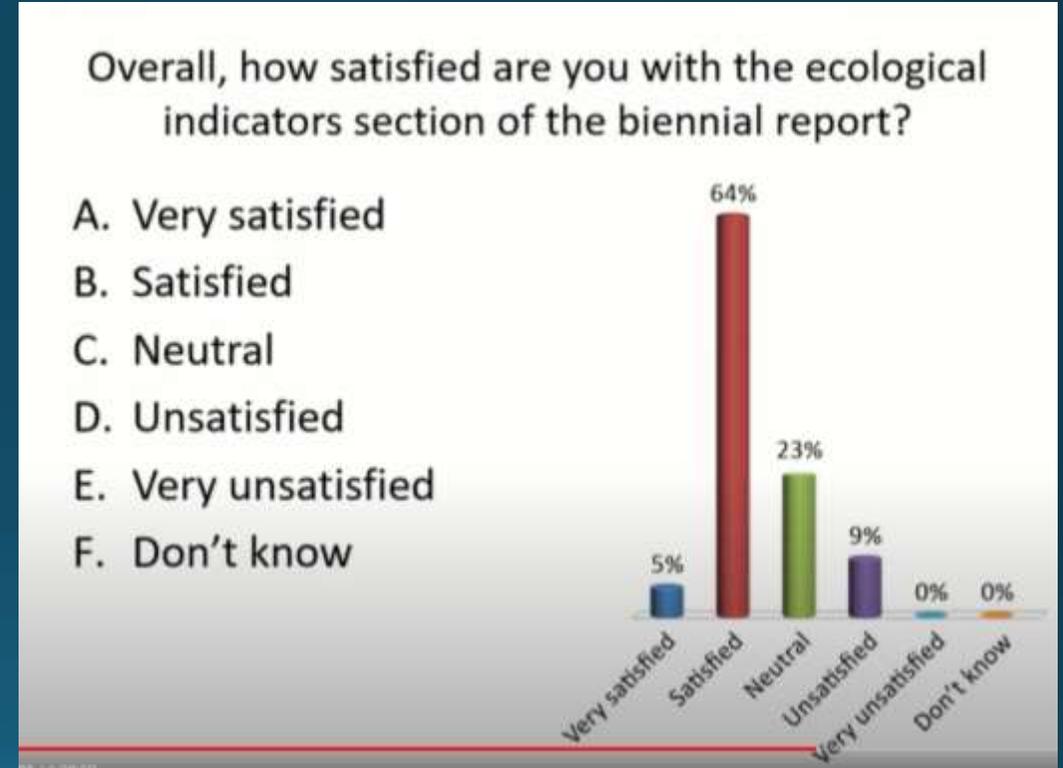
WG/SCG Interactive Session

- At the December WG/SCG meeting, a half-day interactive session was conducted on the ecological indicators.
- This effort built upon the one-on-one interviews conducted with agency leaders.
- WG/SCG members were able to participate in live polling on the purpose and utility of the ecological indicator section of the Biennial Report.



WG/SCG Live Polling Results

- Results indicated that there is a high level of support for the current reporting.
- Results also indicated that there is room for improvement:
 - More graphics
 - Highlight successes
 - Show how restoration is working
 - Better linkage of system-wide ecological indicator responses to projects.



WG/SCG Live Polling Results

- Concerns were raised about the need for continued funding to maintain consistent information and support trend analysis.

Indicators, Next Steps

- Use the feedback from the interactive session to improve the reporting in the Ecological Indicator Section within the 2020 Biennial Report.
- Further improvements will be seen in the 2022 Biennial Report dependent on resources.

Discussion

- Now: OERI Update, System-wide Ecological Indicators.
- Next Up: OERI Update, IDS Alternative Scenarios

2. IDS Alternative Scenarios

- At their October 29, 2019 meeting, the Task Force discussed having different funding scenarios available for the IDS.
- The WG/SCG conducted a workshop session at their December 4, 2019 meeting to discuss potential funding scenarios and further refined the concepts at their February 25, 2020 meeting.
- OERI, USACE, FDEP, and SFWMD staff have also worked together to refine these scenarios.

IDS (October 2019) Overview

- The IDS is a sequencing strategy for the Comprehensive Everglades Restoration Plan (CERP) and some associated non-CERP projects.
- The IDS includes projected timelines for the planning, design, construction, and testing of these projects.
- Estimates of future costs to sustain the depicted schedule of planning and construction are also included.
- The current iteration is dated October 2019 and was presented at the last Task Force meeting.

IDS (October 2019) Overview

- Creating alternative formulations of the IDS itself was discussed, however, the IDS depends upon multiple layers of information: staffing, contracting, project linkages, etc., to optimize the schedule.
- Due to the complexities involved, it was determined that a graphic illustrating the comparative costs/timeframes for the hypothetical scenarios would be sufficient to communicate the impact of alternative funding levels on the overall suite of IDS projects.
- The graphic being presented today is a draft companion piece to the October 2019 IDS.

IDS Alternative Scenarios

- The alternative scenarios considered alternative annual funding levels and examined that impact on the timing and total cost for the projects currently on the IDS.
- Three proposed scenarios:
 - October 2019 IDS with actual funding (2018-2020) and projected costs
 - \$400M/year as envisioned in the "Yellow Book" (1999)
 - Five-year average funding (~\$310M for the 2016-2020 5 year period)
- Include projects on the current October 2019 IDS.
- Use a 3% inflation rate for annual increases in construction costs.

The South Florida Ecosystem Restoration Task Force requested that three different funding scenarios be compared in regards to the projects currently on the Integrated Delivery Schedule (IDS).

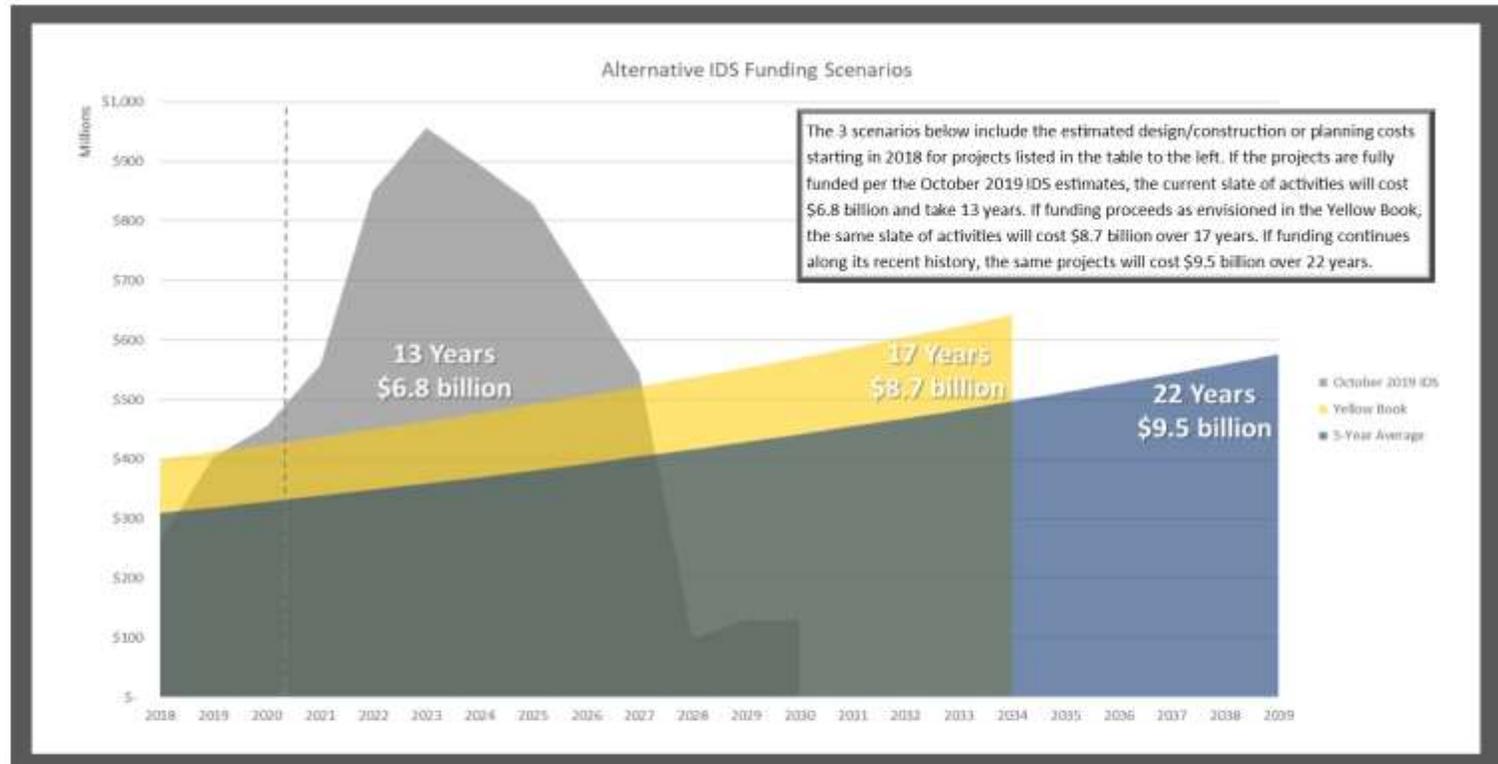
Three Scenarios: **1)** The estimated annual design and construction costs depicted on the October 2019 IDS, **2)** the annual \$400 million envisioned in the Comprehensive Everglades Restoration Plan (CERP) “Yellow Book” (1999), and **3)** a five-year average of funding (~\$310 million beginning with FY2016-2020). The latter two scenarios include a 3% annual increase in costs.

What’s Included: Design and construction costs for projects currently underway (multi-color rows in table) and planning costs for projects in the planning phase (white rows in table).

Why do the scenarios abruptly end? If the annual cost estimates are fully funded, projects currently in design/construction will be completed by 2030. However, more projects will break ground in the coming years. Once authorized, the design and construction of the IDS-listed planning projects (white rows in table) will increase annual cost estimates and extend the timeline beyond FY2030.

Maintaining the Momentum: A healthy and resilient Everglades directly supports our economy and sustainability. Current funding is heading in the right direction, however, the intense construction years ahead will require additional, and significant, investment. Funding needs to stay on track otherwise restoration will take longer and cost more as depicted in the graph below.

PROJECTS AS LISTED ON THE OCTOBER 2019 IDS	
Projects in Design or Construction	
Non-CERP and Foundation Projects:	
	Kissimmee River Restoration
	C-111 South Dade
CERP Generation 1 Projects:	
	Picayune Strand Restoration
	Indian River Lagoon-South
CERP Generation 2 Projects:	
	Caloosahatchee River (C-43) West Basin Storage
	Broward County Water Preserve Areas
	Biscayne Bay Coastal Wetlands Phase I
	C-111 Spreader Canal Western Project
	Central Everglades Planning Project
Projects in the Planning Phase	
	Loxahatchee River Watershed Restoration Project
	Lake Okeechobee Watershed Restoration Project
	Western Everglades Restoration Project
	Biscayne Bay Coastal Wetlands Phase II (BBSEER)
	C-111 Spreader Canal Eastern (BBSEER)
	ASR/Decomp Phase II



NOTES:

- The funding shown for the October 2019 IDS (gray portion of the graph) is only notional, representing approximate funding levels that would be needed to sustain the work displayed in the IDS for any particular fiscal year. The funding does not represent a commitment by the Administration to budget the amounts shown.
- Non-CERP and Foundation Projects on the 2019 IDS that are funded by other program authorities or by other entities are not included on this graph or listed in the table.

IDS Scenarios - Summary

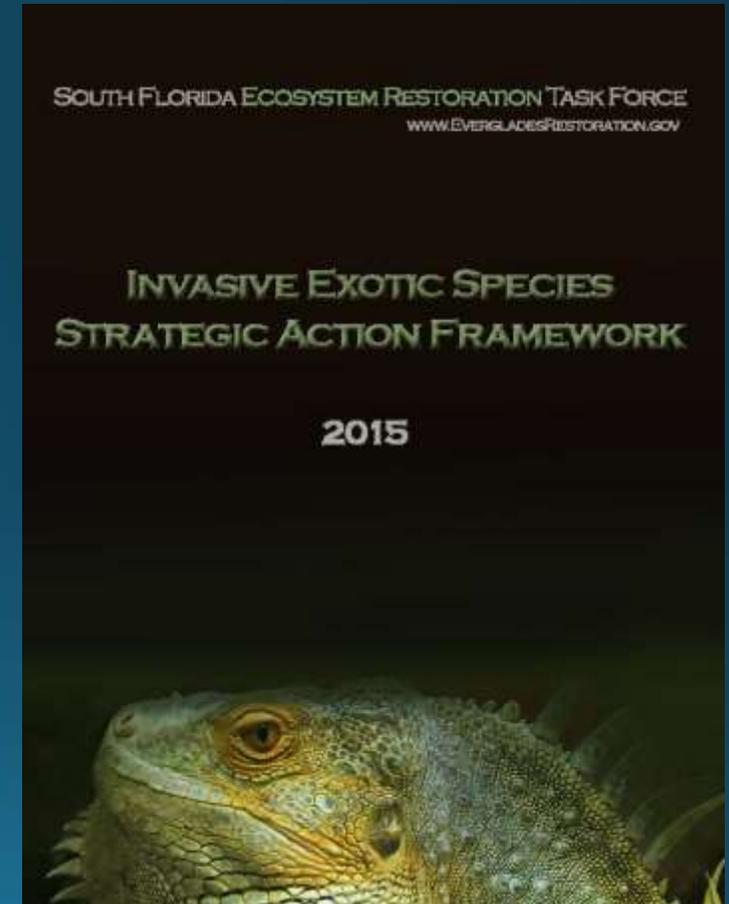
- Building on historic momentum.
- Current funding is heading in the right direction.
- Intense construction years ahead will require additional, and significant, investment.
- Need to stay on track with funding otherwise restoration will take longer and cost more.
- Return on investment: a healthy and resilient Everglades that directly supports our economy and sustainability.

Discussion

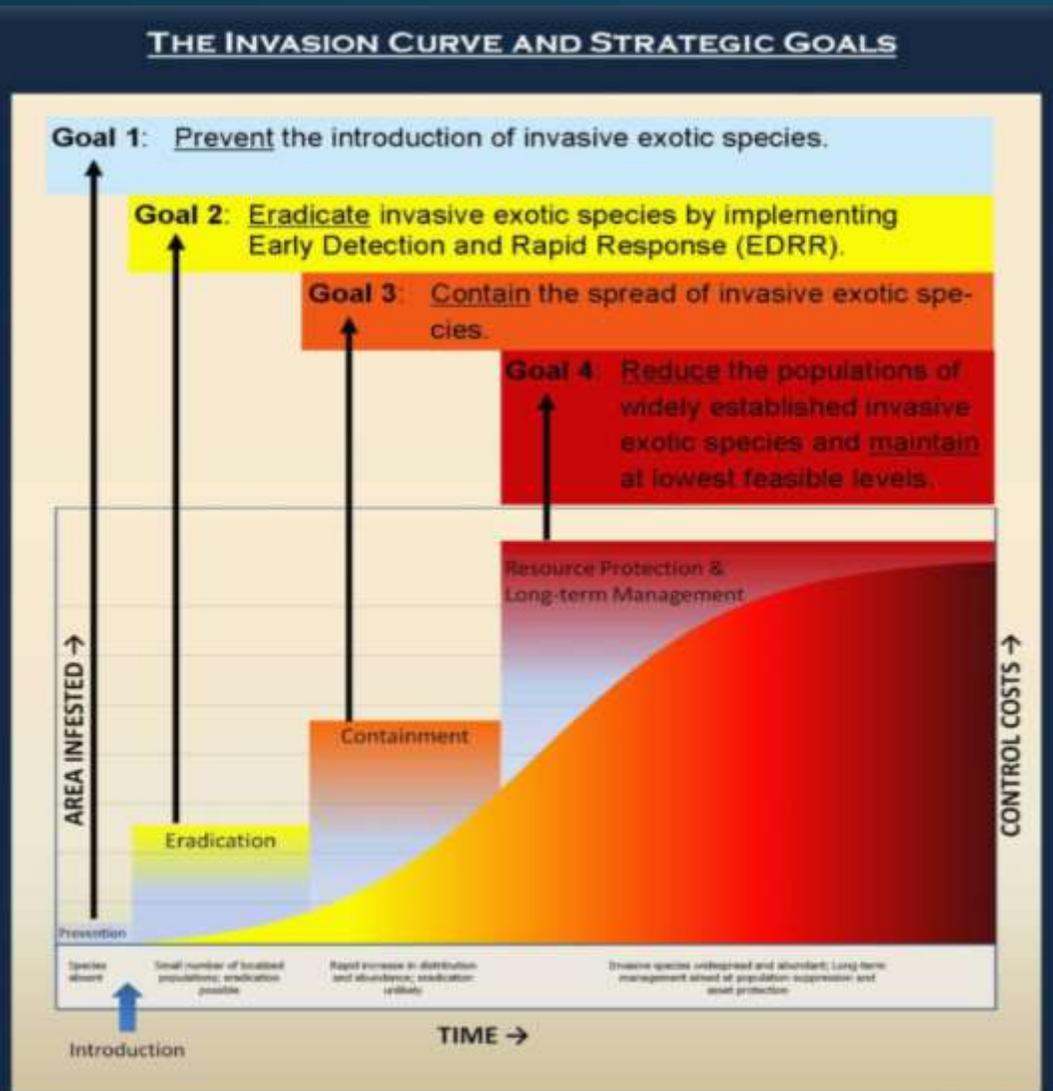
- Now: OERI Update, IDS Alternative Scenarios.
- Next Up: OERI Update, IES Strategic Action Framework

3. IES Strategic Action Framework

- Updating the 2015 IES Framework.
- OERI is working with your IES experts to determine progress made since the 2015 report and to identify our priorities going forward.
- The WG/SCG participated in a priority ranking based upon the 2015 Framework's goals and objectives.



IES Framework - Progress



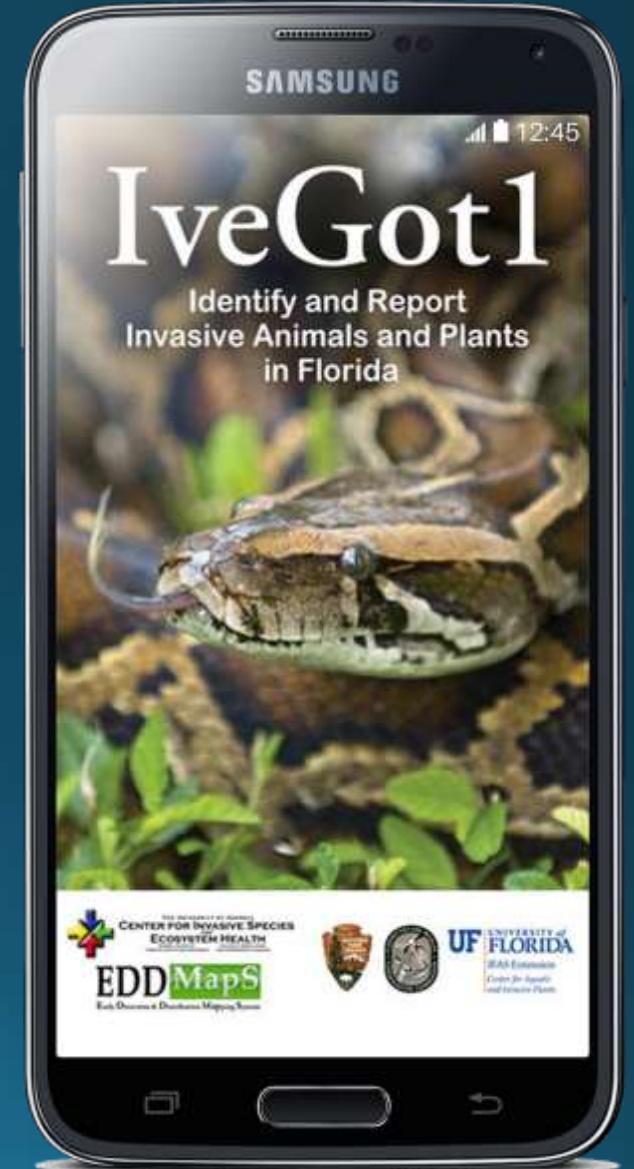
- The Strategic Action Framework's goals and objectives will stay the same and are still valid.
- The Invasion Curve remains the basis for the goals and objectives.

IES Framework - Progress

- Analysis indicates that we are making progress. In general, we have the programs and coordination in place, they just need to be expanded.
- Since 2015, many agencies increased capacity by establishing formal exotics programs and teams, increasing coordination efforts, and conducting outreach to build capacity through public participation.
- Research and tools have been developed to better understand how to manage the ever growing invasion.

IES Framework - Priorities

- Priorities for the next 5 years build upon the progress made to date and include expanding many programs and tools that were implemented priorities from 2015.
- There is an increased focus on prevention tool development and prevention capacity building.



IES Framework – Cross-Cut Budget

- Currently under development.
- Working with partners to determine spending levels for the past fiscal year for each phase of the Invasion Curve.
- The 2020 IES cross-cut budget will provide a snapshot as to where our budgets and priorities align.

IES Framework – Cross-Cut Budget

- 2015 Cross-Cut Budget:
 - Indicated much more (6 times) was being spent on plants than animals.
 - Highlighted need to increase EDRR funding.

Invasive Exotic Animals Funding Amounts (Actual \$)

	USACE	*U.S. DOI	FDACS	FWC	SFWMD	Zoo Miami	Miami Dade EEL	**Palm Beach County Natural Areas Program	Total
Prevention	0	67,838	1,228,139	116,523	0	1,737	0	0	1,406,837
Research	0	30,000	0	30,500	0	0	0	0	60,500
Outreach & Education	0	37,500	49,870	25,000	0	0	0	0	112,370
Prevention Total	0	134,958	1,278,009	172,023	0	1,737	0	0	1,582,707
Eradication (EDRR)	0	31,316	3,133,353	140,014	0	0	0	4,557	3,310,140
Research	0	20,000	0	46,200	0	0	0	0	66,200
Outreach & Education	0	0	91,667	0	0	0	0	0	91,667
EDRR Total	0	51,316	3,225,020	187,114	0	0	0	4,557	3,468,007
Containment	750	43,837	131,966	145,174	0	13,335	0	0	335,062
Research	0	31,280	0	0	0	900	0	0	32,560
Outreach & Education	0	27,610	0	0	0	1,737	0	0	29,347
Containment Total	750	103,277	131,966	145,174	0	15,072	0	0	396,989
Long-term Management	0	119,339	0	261,096	283,404	0	0	99,269	1,447,008
Research	0	85,630	0	0	40,000	0	0	0	99,630
Outreach & Education	0	126,274	0	0	0	0	0	0	126,274
Long-term Mgt. Total	0	1,199,273	0	261,096	323,404	0	0	99,269	2,384,912
TOTAL	750	1,488,707	4,630,995	765,407	323,404	17,039	0	103,826	8,014,613

Invasive Exotic Plants Funding Amounts (Actual \$)

	USACE	U.S. DOI*	FDACS	FWC	SFWMD	Zoo Miami	Miami Dade EEL	Palm Beach County Natural Areas Program**	Total
Prevention	34,105	21,438	1,072,730	0	0	0	0	0	1,078,263
Research	0	0	0	21,144	0	0	0	0	21,144
Outreach & Education	0	37,500	49,870	0	0	0	0	0	87,370
Prevention Total	34,105	58,938	1,072,590	21,144	0	0	0	0	1,196,777
Eradication (EDRR)	0	20,438	0	106,173	0	0	0	52,553	179,164
Research	0	0	0	0	0	960	0	0	960
Outreach & Education	0	0	0	118,485	0	0	0	0	118,485
EDRR Total	0	20,438	0	124,658	0	960	0	52,553	298,607
Containment	232,278	305,438	60,000	512,175	0	0	0	0	1,109,891
Research	0	0	0	0	0	0	0	0	0
Outreach & Education	2,000	0	0	0	0	0	0	0	2,000
Containment Total	234,278	305,438	60,000	512,175	0	0	0	0	1,111,891
Long-term Management	1,309,607	3,183,867	1,674,597	16,567,335	11,361,489	0	2,451,624	5,190,031	43,758,530
Research	50,000	0	0	907,000	100,000	65,000	0	0	1,122,000
Outreach & Education	20,000	78,894	22,856	380,178	0	0	49,905	0	527,011
Long-term Mgt. Total	1,439,607	3,183,261	1,696,911	17,854,713	11,461,489	65,000	2,497,517	5,190,031	45,847,561
TOTAL	1,707,990	3,647,073	2,829,523	18,602,710	11,841,489	65,960	2,497,517	5,243,862	48,054,834

IES Framework – Cross-Cut Budget

- Recent investments have paid off.
- Future funding needs to build on these investments.
 - Resources to support existing programs and further our collective efforts to battle invasive exotic species.
- Anticipated needs in 2020:
 - Increased funding for existing Prevention and EDRR programs.
 - Increased and consistent funding for Long-term Management of plants, particularly if the toolbox is limited, e.g., glyphosate herbicide restrictions.

Discussion

- Now: OERI Update, IES Strategic Action Framework
- Next Up: Report on WG and SCG Activities.